

Task History

June 22, 2011 10:29 PM

Saved answer set '10581274' opened

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Detailed display from Answer set 7 of Highly Potent, Orally Available Anti-inflammatory Broad-Spectrum Chemokine Inhibitors

Highly Potent, Orally Available Anti-inflammatory Broad-Spectrum Chemokine Inhibitors

By: Fox, David J.; Reckless, Jill; Lingard, Hannah; Warren, Stuart; Grainger, David J.

A series of 3-acylamino-caprolactams are inhibitors of chemokine-induced chemotaxis. Branching of the side chain α -carbon provides highly potent inhibitors of a range of CC and CXC chemokines. The most potent compd. has an ED50 of 40 pM. Selected compds. were tested in an in vivo inflammatory assay, and the best compd. reduces TNF- α levels with an ED50 of 0.1 μ g/kg when administered by either s.c. injection or oral delivery.

Indexing

Pharmacology (Section 1-3)

Concepts

Anti-inflammatory agents
Cell migration
Chemotaxis
Human
Inflammation
Neutrophil
Structure-activity relationship
oral antiinflammatory broad-spectrum chemokine inhibitors

CC chemokines
CXC chemokines
Chemokines
Interleukin 8
Macrophage inflammatory protein 1 α
Monocyte chemoattractant protein-1
RANTES(chemokine)
Tumor necrosis factors
oral antiinflammatory broad-spectrum chemokine inhibitors
Biological study, unclassified; Biological study

Substances

853905-44-9P
oral antiinflammatory broad-spectrum chemokine inhibitors
Drug mechanism of action; Pharmacological activity; Reactant; Synthetic preparation; Therapeutic use;
Biological study; Preparation; Uses; Reactant or reagent

Source

Journal of Medicinal Chemistry
Volume 52
Issue 11
Pages 3591-3595
Journal
2009
CODEN: JMCMAR
ISSN: 0022-2623
DOI:
10.1021/jm900133w

Company/Organization

Department of Chemistry
University of Cambridge
Cambridge, UK CB2
1EW

Accession Number

2009:565761
CAN 151:23962
CAPLUS

Publisher

American Chemical Society

Language

English

726187-67-3P
 853905-34-7P
 853905-39-2P
 853905-40-5P
 853905-41-6P
 853905-42-7P
 853905-45-0P
 853905-59-6P
 853905-60-9P
 853905-61-0P
 853905-62-1P
 853905-68-7P
 853905-72-3P
 876063-97-7P
 876063-98-8P
 876063-99-9P
 876064-01-6P
 876064-02-7P
 876064-03-8P
 1160115-32-1P
 1160115-34-3P

oral antiinflammatory broad-spectrum chemokine inhibitors

Drug mechanism of action; Pharmacological activity; Synthetic preparation; Therapeutic use; Biological study; Preparation; Uses

108-18-9 Diisopropylamine
 112-31-2 Decanal
 547-63-7 Methyl isobutyrate
 671-42-1
 870-63-3
 924-50-5 Methyl 3,3-dimethylacrylate
 2094-72-6 1-Adamantanecarbonyl chloride
 2719-27-9 Cyclohexanecarbonyl chloride
 2890-61-1 1-Methylcyclohexanecarbonyl chloride
 3282-30-2 2,2-Dimethylpropionyl chloride
 4301-04-6
 5856-77-9 2,2-Dimethylbutyryl chloride
 15721-22-9 2,2-Dimethylpentanoyl chloride
 19835-38-2
 21568-87-6
 26081-07-2
 28957-33-7
 36278-22-5 1-Cyclohexenecarbonyl chloride
 39482-46-7 2,2-Dimethyl-4-pentenoyl chloride
 39691-62-8 Nonylmagnesium bromide
 50321-59-0
 60631-34-7 2,2-Dimethyldodecanoyl chloride
 67589-90-6
 73152-73-5

oral antiinflammatory broad-spectrum chemokine inhibitors

Reactant; Reactant or reagent

2198-82-5P 2,2,5-Trimethyl-4-hexenoic acid
 53663-29-9P (E)-2-Methyldodec-2-enoic acid
 66478-19-1P
 102944-03-6P 3,3-Dimethyldodecanoic acid
 476690-74-3P (E)-Ethyl 2-methyldodec-2-enoate
 853905-71-2P
 1017249-22-7P
 1017249-74-9P

oral antiinflammatory broad-spectrum chemokine inhibitors

Reactant; Synthetic preparation; Preparation; Reactant or reagent

Supplementary Terms

oral antiinflammatory chemokine inhibitor structure

Citations

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